

Application No. : 10/679,963  
Amdt. Dated : March 23, 2005  
Reply To O.A. Of : December 23, 2004

### REMARKS

By way of summary, claims 11 – 23 were pending in this application. In the present amendment, the Applicants canceled claims 19 – 23 without prejudice or disclaimer, and added new claims 24 – 30. Accordingly, claims 11 – 18 and 24 – 30 remain pending for consideration.

#### Rejections Under 35 U.S.C. §§ 102(b) and (e)

The Office Action rejected claims 11 and 17 – 18 under 35 U.S.C. § 102(e) as being anticipated by U.S. patent no. 6,748,254, issued to O'Neil et al. (the O'Neil patent), and rejected claim 11 or under 35 U.S.C. § 102(b) as being anticipated by U.S. patent no. 5,830,137, issued to Sharf et al. (the Sharf patent). The Applicants respectfully submit the cited art fails to identically teach every element of independent claim 11. See M.P.E.P. § 2131 (stating that in order to anticipate a claim, a prior art reference must identically teach every element of the claim).

For example, amended independent claim 11 recites, among other things,

An optical probe capable of outputting a signal indicative of light transmitted through body tissue, the optical probe comprising:

one or more emitters . . .;

detector circuitry . . .;

a probe housing . . .;

a substantially circular substantially convex emitter lens  
protruding a distance from the probe housing;

a substantially circular substantially convex detector lens  
protruding about the distance from the probe housing;

a protruding optical barrier protruding about the distance from the probe housing between the protruding emitter lens and the protruding detector lens . . .; and

an attachment mechanism . . ., wherein attachment of the attachment mechanism to the body tissue positions the probe housing against the body tissue with sufficient pressure to noninvasively recess the protruding optical barrier into the body tissue and to noninvasively recess the protruding emitter lens and the protruding detector lens into the body tissue substantially along a plane thereof (emphasis added).

In contrast, the O'Neil patent discloses lenses 4 bonded within and above a semi-rigid optical mount 6 (Figs. 1 – 3; col. 3:52-57 and 3:62 – 4:2). It is the lenses 4 and not the mount 6 that protrudes into the body tissue (col. 5:32 – 42). Accordingly, the O'Neil patent fails to teach or suggest every element of amended

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claim 11. Additionally, claims 17 – 18, which depend from claim 11, are patentable over the O'Neil patent for the same reasons articulated above with respect to amended claim 11, and because of the additional features recited therein.

Moreover, the Sharf patent teaches that

[a]lthough shown as flat surfaces, face pieces 16, 18, and 91 can alternatively be shaped to form discrete lenses (not shown) to focus the radiant energy from the LEDs 13a-13d and 15a-15d onto the skin 2 and into the blood 4 and from the skin 2 onto the photodiode 26, 62. (Figs. 3 – 7; particularly Figs. 5 and 7, items 16 and 18; Col. 8:59 – 63).

However, the Sharf patent fails to teach or suggest any substantially circular substantially convex lens structures and the Sharf patent requires that the detector 26 is positioned within the face pieces 16 and 18. Moreover, the Sharf patent fails to teach or suggest any optical barriers that noninvasively recess into tissue during application of the optical probe thereto. Accordingly, the Sharf patent fails to teach or suggest every element of amended claim 11.

Based on at least the foregoing, the O'Neil and Sharf patents fail to individually teach or suggest every element of amended claim 11; therefore, the Applicants respectfully submit that the O'Neil and Sharf patents fail to anticipate amended Claim 11. Accordingly, the Applicants request withdrawal of the rejections based thereon.

#### Rejection Under 35 U.S.C. § 103(a)

The Office Action rejected claim 12 – 16 under 35 U.S.C. § 103 as being unpatentable over the Sharf patent in view of U.S. patent no. 4,802,485, issued to Bowers et al. (the Bowers patent). The Applicants submit the Sharf patent, alone or in combination with the Bowers patent, fails to teach or suggest the elements of claims 12 – 16. See M.P.E.P. § 2143 (stating that in order to establish a *prima facie* case of obviousness for a claim, the prior art references must teach or suggest all the claim limitations).

As discussed in the foregoing, the Sharf patent fails to teach or suggest any substantially circular substantially convex lens structures or any optical barriers that noninvasively recess into tissue during application of the optical probe. The Bowers patent is also devoid of these teachings and therefore, the Sharf patent, alone or in

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combination with the Bowers patent, fails to teach or suggest all the claim limitations of amended claim 11. Similarly, claims 12 – 16, which depend from claim 11, are patentable over any combination of Sharf and Bowers for the same reasons articulated above with respect to amended claim 11, and because of the additional features recited therein. For example, claim 13 recites a pressure applicator comprising a substantially convex biasing member.

Accordingly, the Applicants submit that the cited prior art fails to render obvious any of claims 11 – 18.

#### New Claims

New claims 24 – 30 have been added to more fully define the Applicant's invention and are believed to be fully distinguished over the prior art of record. For example, claims 24 – 30 depend from claim 11, are thus are patentable over any combination of Sharf and Bowers for the same reasons articulated above with respect to amended claim 11, and because of the additional features recited therein. For example, claims 24 – 27 capture lens dimension subject matter and claims 28 – 30 capture particular wavelength selections that improve the accuracy of legacy oximetry systems.

#### Request For Telephone Interview

In view of the forgoing, the present application is believed to be in condition for allowance, and such allowance is respectfully requested. If further issues remain to be resolved, the Applicants' undersigned attorney of record hereby formally requests a telephone interview with the Examiner. The Applicants' attorney can be reached at (949) 721-2946 or at the number listed below.

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In addition, please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR,  
LLP

Dated: March 23, 2005

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